MINI BF109

OPERATING MANUAL

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Shenzhen Famous Electronic Tech Co., ltd.

ELECTRIC POWERED REMOTE CONTROL AIRPLANE

Please read before operating this system!

We would like to thank you for purchasing an innovative new product, designed for the hobby enthusiast. The **MINI BF109** incorporates the use of a Radio Transmitter, a speed controller, a electronic motor, and electronic servos to provide long time enjoyment and give the user an introduction into the excitement of R/C flight.

Main specification

SPECIFICATION

WINGSPAN	:	800mm (31.5 inches)
LENGTH	:	750mm (29.5 inches)
WEIGHT	:	430g (15.2 oz)
BATTERY	:	7.4V Li-Po Battery
POWER SYSTEM	:	Outrunner Brushless Motor
RC SYSTEM	:	4 Channel, 3 or 4 Servos And1 Brushless ESC

The airplane offers the following characteristics

High speed, high scale performance, and suitable for mediate or a above level modelers.

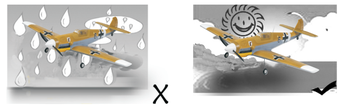
Statement

1 This is not a toy. It is for experienced modelers only. You are responsible for the safe operation of this model and any damage or harm it may cause;
2 Please adjust this plane according to instruction and make sure finger and other parts out of rotating parts of plane, or it may cause damage to the plane or injury.
3 Users should follow all instructions properly and assemble the model correctly. it is your responsibility to insure the battery's charged correctly, following these instructions.

Safety precautions !

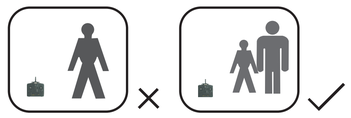
Please read this section until you fully understand!

(1) Do not fly in strong wind or bad weather



(2) Never fly the model in crowded areas, where there are lots of people, automobiles on the road or power lines overhead. Also do not to fly around the airport. Please make yourself enough room for the flying and operating, as the plane can travel at high speed. Remember you are responsible for the safety of others

(3) Children under the age of 12 should have an adult guide. Never recommend for the children under the age of 14.



(4) Never leave the charger in wet conditions.

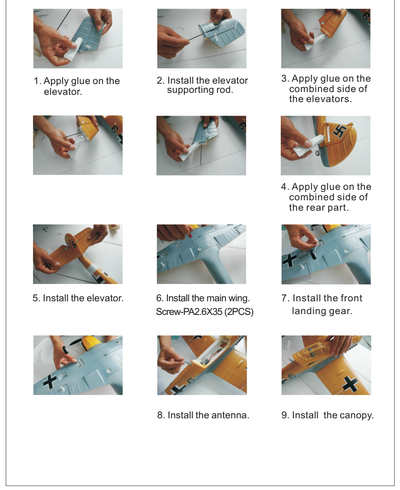
(5) The **MINI BF 109** is made from PA and polythene which are tinder. When it meets the heat, transfiguration can easily happen, so you must keep it away from heat.

(6) Do not attempt to catch the **MINI BF 109** while flying, please do not touch the propeller.

(7) Never leave this system unattended around children with battery in the unit, as injury may be caused due to children's turning on the transmitter or the plane.
(8) During the preparation for the flight, please remember to turn on the transmitter before connecting the battery pack.

(9) Close the throttle on the transmitter before connecting battery otherwise the motor may operate

ASSEMBLY



1. Apply glue on the elevator.
2. Install the elevator supporting rod.
3. Apply glue on the combined side of the elevators.
4. Apply glue on the combined side of the rear part.
5. Install the elevator.
6. Install the main wing. Screw-PA2.6X35 (2PCS)
7. Install the front landing gear.
8. Install the antenna.
9. Install the canopy.

Notice!
Don't fly the airplane until one hour later after finishing assembly, as the glue may not function well.

Preparation before flight

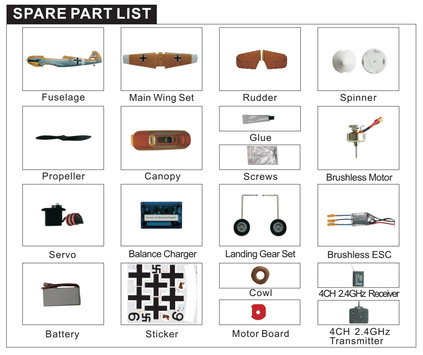
1.Charge the battery, Green light means full charged.

2.Throttle in lowest level, and put trim in middle level.

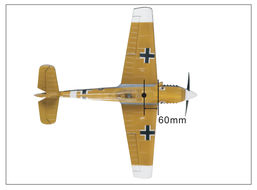
3.Turn on the transmitter.

4.Connect power battery, adjust the elevator and rudder.

SPARE PART LIST



CENTER OF GRAVITY (C.G.)



Flight Preparation

Make sure that batteries in your transmitter are fresh and the antenna is extended all the way up. This will ensure full range for your aircraft. If you notice the plane is going to crash, cut throttle immediately. This will minimize damage.

Flight adjustment

1. **MINI BF 109** will fly better with fully-charged batteries.
2. Keep flight straight: when you find it is difficult to fly straightly, please adjust the trim on the transmitter. For example, when you find it always fly leftward please push the trim on the transmitter in verse direction—right, as this will move the rudder to compensate.
3. Keep flight horizontal: when you find it is difficult to fly **MINI BF 109** straightly, please adjust the trim on the transmitter. For example, when you find it always fly upward; please push the trim on the transmitter toward the top, as this will adjust the position of the elevator.

Flight attention

1. Never fly in strong wind.
2. Do not fly at any place where another same-frequency model is flying.
3. Taking off:
Always take off toward the wind
If you want to launch **MINI BF 109** by hands, maximize the power(including the micro adjustment)and run several meters to accelerate yourself, at last throw it horizontally.
If you want to launch **MINI BF 109** on the ground, maximize the power and let it accelerate, keep it running straightly, after it runs more than 60 feet, you can pull the elevator joy stick, and it will take off.

4. Course: you need only 30% of the maximum power to keep **MINI BF 109** flying. It is a good idea to fly with power for a while and glide for a while . In this way You can increase your maximum flight time and familiarize yourself with landing approaches.
5. Landing: Before landing, switch off the power, fly toward the wind, and when **MINI BF 109** flies near to the ground, you may pull the elevator joystick and it will land gently. It really needs practice, although it sounds easy. it may be difficult for yo until you do this many times.

Battery Charger User Manual

The design of FMS-08001 Li-battery balance charger conforms to the latest technology, enabling the stable and balance charge to battery. This product has various advantages of easy-to-use, safety and reliability etc, ensuring to avoid the reduction of battery performance caused by unbalanced discharge and the risks resulted from unbalanced charge.
Please read this manual carefully prior to use this product, ensuring to fully understand the performance of FMS-08001 and product safety.

Power Supply Sizing

1. It is recommended to use 11-14V,20W,DC power supply, or use Vehicle Battery>15AH, 12V(safety charge voltage range from 11V14V).
2. Do not use DC power supply>14V.

Technical Data:

1. Input: DC 11v-14v,1A,output:DC 12.6V,800mA (+-10%).
2. Available to balanced or unbalanced charge 2 or 3 battery blocks.
3. Dimension size:73×50×25mm.
4. The typical value of voltage difference among 3 full-charged battery blocks is lower than 40mV.
5. The cut-off voltage of charger ranges from 4.19V-4.21V.

Danger:

1. Do not charge 2 or 3 batteries at the same time.
2. Do not charge other batteries than Li-battery. Or else, It will cause battery abnormal(over-heat or fire). The battery type must be validated prior to charging,

Warning:

In case of FMS-08001 in use, please stay and take care of the charging process .If any accident occurs, terminate the charging process immediately. In addition, stop charging immediately if the battery is overheating.

Notes:

1. In case of FMS-08001 in use, keep the charger away from inflammable thing. The electric spark caused by connecting or disconnecting battery is highly dangerous to cause explosion.
2. During the charger in use, please stay and take care of the charging process. If any accident occurs, terminate the charging process immediately. In addition, stop charging immediately if the battery is overheating.
3. Do not charge other batteries than Li-battery.
4. Do not charge immediately in case of battery in tepidity.
In case that charge the battery in tepidity, the battery can't be fully charged to the highest capacity,
and thus can't reach the maximal performance. This maybe result into the failure due to overheated. Therefore, the battery must be charged after battery is fully cooled.
5. Do not disassembly FMS-08001 and its accessories.
The disassembly or re-assembly of FMS-08001 and its accessories may cause malfunction or failure, and also cause malfunction of abnormal operation.

Introduction:

1. Connect the charger with regulated power supply, the red LED of power supply is on.
2. Connect the battery to be charged , the green LED is on, and then start the constant-current-restricted –voltage charging mode with 800mA.
3. The green LED will be off after charge fully completed.